



FROM PG TO AD: RESEARCH FINDS A LINK BETWEEN GUM DISEASE AND ALZHEIMER'S

A common gum disease bug, *Porphyromonas gingivalis* (Pg) plays a 'central role' in the development of Alzheimer's Disease (AD), according to scientists who say they have finally found 'solid evidence' linking the bacteria to dementia (<http://advances.sciencemag.org/content/5/1/eaau3333>).

There have been previous suggestions that Pg may play a role in Alzheimer's, but the latest study by a US-led international team of scientists appears to put the link beyond question.

Researchers made the discovery after analysing brain tissue, spinal fluid, and saliva from dead and living patients with diagnosed and suspected Alzheimer's. They found evidence of toxic enzymes, known as gingipains, that are released by *P. gingivalis*, as well as DNA from the bacterium.

The scientists tested drugs that blocked gingipains and found they were able to halt the neurodegeneration. The team has now developed a new drug, COR388, that better penetrates the central nervous system and could form the basis of a human Alzheimer's treatment.

A large-scale clinical trial that will involve giving the drug to patients with mild to moderate Alzheimer's is planned for later this year. Professor Damien Walmsley, scientific adviser to the BDA, said: 'This study offers a welcome reminder that oral health can't remain an optional extra in our health service. Everyone's life can be improved by regular appointments and good oral hygiene.'



Widening gap between rich and poor Scots visiting their dentist, figures suggest

People from Scotland's most deprived areas are less likely to have visited their NHS dentist in the past two years than their more affluent peers, new figures indicate. The gap for both adults and children has trebled in the past decade and is now the largest on record, according to NHS Scotland Information Service Division data.

For adults, 62.2% of those in the poorest areas had seen their dentist in the two year period up until September 2018 period, compared to 72.7% of those in the most well-off neighbourhoods. Gaps of nine and 10 percentage points for children and adults respectively have risen from three percentage points in 2008. This is despite adults living in the most deprived areas being more likely to be registered with an NHS dentist than those in more affluent areas. The registration figures for children were similar across all areas, at more than 90%.

©cheat/Stock/Getty Images Plus



NEW STRATEGY TO COUNTER ANTIBIOTIC RESISTANCE

A five year plan to tackle the problem of drug-resistant superbugs was unveiled

by Health Secretary Matt Hancock at the World Economic Forum at Davos, Switzerland. The new UK strategy, backed by the prime minister, will see the government adopt targets to reduce infection and antibiotic use among humans and in livestock and pets.

The UK will cut drug-resistant infections by 10% and reduce human antibiotic use by 15% over the next five years as part of a new strategy to tackle so-called superbugs.

Drug companies will be paid millions for

developing antibiotics to fight a superbug threat described as more dangerous than terrorism or climate change.

No new class of antibiotic has been discovered since 1980, with the pharmaceutical industry reluctant to carry out costly research into the area. Companies cannot expect blockbuster sales from new antibiotics because they would be held in reserve for cases in which existing medicines fail. To separate profits from sales, the NHS will pay companies up front if they produce an effective new drug, a commitment that could ultimately cost millions of pounds a year.

Dates for your diary

If you have an event you want featured in 2019, email the Editor: caroline.holland@nature.com

BSP 2019

The 2019 BSP Conference takes place in Brighton 24-26th April
Details here <http://www.bsperia.org.uk/events/info/bsp-conference-2019>.

The ADI Team Congress 2019

May 2-4, EICC, Edinburgh
The Future of Dental Implantology: Techniques-Technology-Teamwork.
An event for experienced dental professionals as well as those who have just started out with dental implants. The event will see a major

trade exhibition hosting a wide selection of stands. For more information, please visit: <https://www.adi.org.uk/events/events.php>.

National Orthodontic Therapist Day

May 17, Mandec, Manchester
Speakers: David Waring, Steve Chadwick, Simon Littlewood, Amy Gallacher, Richard Needham, Badri Thiruvengkatachari, Ovais Malik.
Limited spaces, book early: www.bos.org.uk.